

JOB SHEET 2-4-35
CREATING GENERIC USER FUNCTIONS
One-Time Product Request/Display of Non-associated RPG Products

PART 1: REQUESTING PRODUCTS

INTRODUCTION

It is important to quickly request several products from other WSR-88Ds without having to manually request them every time they are needed. Setting up "generic" User Functions easily solves this problem. In fact, if properly done, one User Function can call every radar to which you are allowed to dial-in.

The best way to specify another RPG is to define a "Generic" User Function and execute it from the Applications Terminal. Therefore, we suggest a User Function of this type be assigned a number from 31 to 60, which may only be executed at the Applications Terminal.

OBJECTIVE

Create and invoke a User Function requesting a Base Reflectivity (R) and Base Velocity (V) product as a Non-associated PUP.

REFERENCE

NWS EHB 6-531-1, USERS GUIDE: PUP/RPGOP, Section 11.0

PROCEDURE

1. From the Main Menu, type **U** and press **RETURN**.
 - The User Function Menu displays.
2. Type **D,31,RPG REQ REF VEL 0.5** and press **RETURN**.
 - This command **Defines User Function 31** entitled **RPG_REQ_REF_VEL_0.5**.
 - This User Function requests a Base Reflectivity (R) product and a Base Velocity (V) product from any radar we are allowed to dial-in to.
 - Note: The request queue allows up to 40 products at a time.

1

MAIN MENU

COMMAND: **U**
 FEEDBACK:

Enter command and press return. For assistance, press the HELP button (F5).

(C)ONTROL
 (S)TATUS
 (D)ISPLAY
 (R)OUTINE PRODUCT SET
 (G)EN AND DISTRIBUTE PRODUCTS
 (T)IME LAPSE
 (A)RCHIVE
(U)SER FUNCTION
 (AD)APTATION DATA
 (M)ONITOR PERFORMANCE
 (H)ELP

UNACKNOWLEDGED ALERTS
 ACKNOWLEDGED ALERTS
 SYSTEM STATUS

ALPHA PRODUCT QUEUE INDICATOR
 RPG PRODUCT REQUEST STATUS

2

USER FUNCTION MENU

COMMAND: **U,D.31.RPG REQ REF VEL 0.5**
 FEEDBACK:

Enter command.

(E)XECUTE, <UF#>, <rpg>
 (C)ANCEL EXECUTION
(D)EFINE, <UF#>, <title>
 (E)ND DEFINE AND EXAMINE *, (E)ND UF
 <UF#>, [User Function # to receive control]
 (W)AIT, <SECONDS>
 (E)XAMINE, (T)ITLES
 <UF#> * [Examine and edit]

*Note: Edit commands are available when the User Function Examine screen is displayed.

3. a. Type D,G,R (typing over the "U") and press **RETURN**.
 - It is necessary to type over the "U" since this is a command from the **(D)**isplay Menu, not the **(U)**ser Function Menu. The Display Graphic Edit Screen appears, with the "default" parameters, for the Base Reflectivity product.
- b. TAB through, making sure the product has these parameters:

<u>DTA</u>	<u>LVL</u>	<u>RES</u>	<u>SLICE</u>	<u>RPG</u>	<u>TIME</u>	<u>DATE</u>
<u>16</u>	<u>.54</u>	<u>0.5</u>	<u>*</u>	<u>*</u>	<u>*</u>	

- The parameters for the requested Base Reflectivity Product are defined.
 - The asterisk (*) in the RPG column tells the system to dial a Non-Associated RPG to be defined later.
 - The asterisks (*) entered for the time and date fields tells the system to skip the PUP data base check for this product and forward this request **directly** to the RPG. If these two fields are left blank, the latest stored products in your PUP's data base, from this RPG, display (see Part 2 of this Job Sheet).
 - Press **RETURN** after completing the line.
4. a. Ensure the command line reads D,G,V and press **RETURN**.
 - The Display Graphic Product Edit Screen appears, with the default parameters, for the Base Velocity.
 - b. TAB through, making sure the product has these parameters:

<u>DTA</u>	<u>LVL</u>	<u>RES</u>	<u>SLICE</u>	<u>RPG</u>	<u>TIME</u>	<u>DATE</u>
<u>16</u>	<u>.54</u>	<u>0.5</u>	<u>*</u>	<u>*</u>	<u>*</u>	

- This defines the parameters for the requested Base Velocity Product.
- Press **RETURN** after completing the line.

5. At the Command Line, type U,EN,E (typing over the "D") and press **RETURN**.
 - This ends the User Function definition and displays the list of commands.

3b

DISPLAY GRAPHIC PRODUCT EDIT SCREEN

COMMAND: **D,G,R**

FEEDBACK:

Edit product parameters and press RETURN to request product.

PROD NAME	DTA LVL	RES	SLICE	PARAM1	PARAM2	RPG	TIME	DATE	SCR	REQ PRI	RPT CNT	REQ MAP
R	<u>16</u>	<u>.54</u>	<u>0.5</u>			<u>*</u>	<u>*</u>	<u>*</u>	L	H	1	N

4b

DISPLAY GRAPHIC PRODUCT EDIT SCREEN

COMMAND: **D,G,V**

FEEDBACK:

Edit product parameters and press RETURN to request product.

PROD NAME	DTA LVL	RES	SLICE	PARAM1	PARAM2	RPG	TIME	DATE	SCR	REQ PRI	RPT CNT	REQ MAP
V	<u>16</u>	<u>.54</u>	<u>0.5</u>			<u>*</u>	<u>*</u>	<u>*</u>	L	H	1	N

5

EXAMINE/EDIT USER FUNCTION 31: RPG_REQ_REF_VEL_0.5

COMMAND: **U,**FEEDBACK: **UF31 DEFINITION COMPLETE**

EDIT CMDS: [EACH EDIT CMD MUST BE PRECEDED BY '(U)SER FUNCTION',]

(DEL)ETE,<LINE#> (R)EPLACE END, [(E)ND OR <UF#>]

(I)NSERT,<LINE#> (REN)AME UF TITLE,<NEW TITLE>

1.	D,G,R	0.5	*	*	L
2.	D,G,V	0.5	*	*	L
3.	<u>U,EN,E</u>				

6. At the Applications Terminal, type U,E,31,<rpg>.
 - **Ask your instructor which WSR-88D you are allowed to dial-in to.**
 - In a few minutes the feedback line indicates that you are connected and the requested products should follow shortly.
 - The only way to know which RPG is being dialed-in, is to specify the RPG at the Applications Terminal. If the Graphic Tablet is used or you entered a semicolon instead of an RPG mnemonic, the last RPG entered is used.

NOTE THAT:

- KRPG is just an example mnemonic. You actually enter the RPG mnemonic for the WSR-88D of choice.
- Entering "U,E,31,KRPG" accomplishes two functions. First, the User Function starts and second, the "KRPG" entered becomes the default <rpg>. This means that every User Function, requiring an RPG, uses "KRPG" until the PUP operator enters another KRPG" mnemonic. In addition, "KRPG" is placed in the Program "State" file and is retained, in memory, if the PUP is brought down and back up.

PART 2: DISPLAYING PRODUCTS**INTRODUCTION**

It is equally important to quickly display these products, from other WSR-88Ds, without having to manually display them every time they are needed. Setting up "generic" User Functions can easily solve this problem. Once the products are requested, and reside in your data base, they are easily displayed via another User Function. Again, if properly done, the User Function displays the same products based on your RPG request User Function.

Remember, the best way to specify products from a different RPG is executing this User Function from the Applications Terminal. Therefore, we suggest that this type of User Function be assigned a number from 31 to 60.

6

USER FUNCTION MENU

COMMAND: U,E.31,<RPG>
FEEDBACK:

Enter command.

(E)XECUTE, <UF#>, <rpg>

(C)ANCEL EXECUTION

(D)EFINE, <UF#>, <title>

(E)ND DEFINE AND EXAMINE *,

(E)ND UF

<UF#>, [User Function # to receive control]

(W)AIT, <SECONDS>

(E)XAMINE,

(T)ITLES

<UF#> * [Examine and edit]

*Note : Edit commands are available when the User Function Examine screen is displayed.

OBJECTIVE

Create and invoke a User Function displaying a Base Reflectivity (R) and Base Velocity (V) product from a Non-associated RPG.

REFERENCE

NWS EHB 6-531-1, USERS GUIDE: PUP/RPGOP, Section 11.0

PROCEDURE

1. From the Main Menu, type U and press **RETURN**.
 - This User Function Menu displays.
2. Type D,32,RPG DISPLAY REF VEL 0.5 and press **RETURN**.
 - This Defines User Function **32** entitled **RPG_DISPLAY_REF_VEL_0.5**.
 - This User Function displays a Base Reflectivity (R) product and a Base Velocity (V) product from any radar as long as the products are already in the PUP's data base.
3. a. Type D,G,R (typing over the "U") and press **RETURN**.
 - It is necessary to type over the "U" since this is a command from the **(D)**isplay Menu, not the **(U)**ser Function Menu. The Display Graphic Edit Screen will appear, with the "default" parameters, for the Base Reflectivity product.

b. TAB through, making sure the product has these parameters:

<u>DTA</u>	<u>LVL</u>	<u>RES</u>	<u>SLICE</u>	<u>RPG</u>	<u>SCR</u>
<u>16</u>	<u>.54</u>	<u>0.5</u>	<u>*</u>	<u>L</u>	

 - This defines the parameters for the Base Reflectivity Product to be displayed.
 - The asterisk (*) in the RPG column tells the system that the Non-associated RPG mnemonic will be defined later. The "L" in the SCR column displays the Reflectivity product on the left screen.
 - Press **RETURN** after completing the line.

1

MAIN MENU

COMMAND: U
 FEEDBACK:

Enter command and press return. For assistance, press the HELP button (F5).

(C)ONTROL
 (S)TATUS
 (D)ISPLAY
 (R)OUTINE PRODUCT SET
 (G)EN AND DISTRIBUTE PRODUCTS
 (T)IME LAPSE
 (A)RCHIVE
(U)SER FUNCTION
 (AD)APTATION DATA
 (M)ONITOR PERFORMANCE
 (H)ELP

UNACKNOWLEDGED ALERTS
 ACKNOWLEDGED ALERTS
 SYSTEM STATUS

ALPHA PRODUCT QUEUE INDICATOR
 RPG PRODUCT REQUEST STATUS

2

USER FUNCTION MENU

COMMAND: U,D,32,RPG DISPLAY REF VEL 0.5
 FEEDBACK:

Enter command.

(E)XECUTE, <UF#>, <rpg>
 (C)ANCEL EXECUTION
(D)EFINE, <UF#>, <title>
 (E)ND DEFINE AND EXAMINE *, (E)ND UF
 <UF#>, [User Function # to receive control]
 (W)AIT, <SECONDS>
 (E)XAMINE, (T)ITLES
 <UF#> * [Examine and edit]

*Note: Edit commands are available when the User Function Examine screen is displayed.

3b

DISPLAY GRAPHIC PRODUCT EDIT SCREEN

COMMAND: D,G,R
 FEEDBACK:

Edit product parameters and press RETURN to request product.

PROD NAME	DTA LVL	RES	SLICE	PARAM1	PARAM2	RPG	TIME	DATE	SCR	REQ PRI	RPT CNT	REQ MAP
R	<u>16</u>	<u>54</u>	<u>0.5</u>			<u>*</u>			<u>L</u>	H	1	N

4. a. Ensure the command line reads D,G,V and press **RETURN**.
 - The Display Graphic Product Edit Screen appears, with the default parameters, for the Base Velocity.
 - b. TAB through, making sure the product has these parameters:

<u>DTA LVL</u>	<u>RES</u>	<u>SLICE</u>	<u>RPG</u>	<u>SCR</u>
<u>16</u>	<u>.54</u>	<u>0.5</u>	<u>*</u>	<u>R</u>
 - This defines the parameters for the Base Velocity Product to be displayed.
 - The asterisk (*) in the RPG column tells the system that the Non-associated RPG mnemonic will be defined later. The "R" in the SCR column displays the velocity product in the right screen.
 - Press **RETURN** after completing the line.
5. At the Command Line, type U,EN,E (typing over the "D") and press **RETURN**.
 - This ends the User Function definition and displays the list of the commands.
6. At the Applications Terminal, type U,E,32,<rpg>.
 - **Make sure the <rpg> is the same mnemonic you used in part one of this Job Sheet.**

END

4b

DISPLAY GRAPHIC PRODUCT EDIT SCREEN

COMMAND: **D,G,V**

FEEDBACK:

Edit product parameters and press RETURN to request product.

PROD NAME	DTA LVL	RES	SLICE	PARAM1	PARAM2	RPG	TIME	DATE	SCR	REQ PRI	RPT CNT	REQ MAP
V	16	54	0.5			*			R	H	1	N

5

EXAMINE/EDIT USER FUNCTION 32: RPG_DISPLAY_REF_VEL_0.5

COMMAND: **U,**FEEDBACK: **UF32 DEFINITION COMPLETE**

EDIT CMDS: [EACH EDIT CMD MUST BE PRECEDED BY '(U)SER FUNCTION',]

(DEL)ETE,<LINE#> (R)EPLACE END, [(E)ND OR <UF#>]

(I)NSERT,<LINE#> (REN)AME UF TITLE,<NEW TITLE>

1.	D,G,R	0.5	*	L
2.	D,G,V	0.5	*	R
3.	U,EN,E			

6

USER FUNCTION MENU

COMMAND: **U,E,32,<RPG>**

FEEDBACK:

Enter command.

(E)XECUTE, <UF#>, <rpg>

(C)ANCEL EXECUTION

(D)EFINE, <UF#>, <title>

(E)ND DEFINE AND EXAMINE *, (E)ND UF

<UF#>, [User Function # to receive control]

(W)AIT, <SECONDS>

(EXA)MINE, (T)ITLES

<UF#> * [Examine and edit]

*Note: Edit commands are available when the User Function Examine screen is displayed.